## **ABSTRACT**

The *GAI* gene of *Arabidopsis thaliana* has been cloned, along with mutant and homologue gene sequences. Expression of such genes in plants affect characteristics in the plant including growth. *GAI* expression inhibits growth of plants, which inhibition is antagonized by gibberellin (GA). Expression of *gai* mutants confer a dwarf phenotype which is GA-insensitive. Manupulation of *GAI* and *gai* genes in plants results in tall or dwarfed plants. Dwarf plants are useful in particular for reduction in crop losses resulting from lodging.